

EXHIBIT 10

UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF CALIFORNIA

SAN DIEGO UNIFIED PORT)
DISTRICT, a public)
corporation; and CITY OF)
SAN DIEGO, a municipal)
corporation,) Case No.
Plaintiffs,) 3:15-cv-00578-WQH-AGS
vs.)
MONSANTO COMPANY, SOUTIA)
INC., and PHARMACIA)
CORPORATION,)
Defendants)

VIDEOTAPED DEPOSITION OF:
RICHARD DeGRANDCHAMP, Ph.D.
Denver, Colorado
June 18, 2019

Reported by: Melanie L. Giamarco, RMR CRR
Job No.: 161725

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1 June 18, 2019

2 9:00 a.m.

3

4 VIDEOTAPED DEPOSITION OF RICHARD

5 DeGRANDCHAMP, Ph.D., taken by the Defendants, at
6 1750 Welton Street, Denver, Colorado, before
7 Melanie L. Giamarco, a Registered Professional
8 Reporter, Registered Merit Reporter, Certified
9 Realtime Reporter and Notary Public of the State of
10 Colorado.

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1 Q. That's all I asked.

2 A. All right.

3 Q. Okay. Do you know what products Dow
4 tested for cancer in the 1930s?

5 A. It'll be my same answer I gave you last
6 time. No. They were tremendously proud of the
7 fact that they conducted their first cancer study
8 in the late 1930s, but as most companies are loathe
9 to do, they didn't give any details. And they
10 didn't publish that study in the scientific
11 literature, that I could find. And I spent some
12 time looking for it.

13 Q. Do you know what the product was that
14 they first tested?

15 A. As I just said, I could not find any
16 information because, apparently, they didn't
17 publish it.

18 Q. And you don't know what triggered their
19 interest in conducting that study, correct?

20 MR. CORLEY: Objection, form. It's vague
21 and ambiguous. Calls for the witness to speculate.

22 A. No.

23 Q. Do you know how many chemicals Dow
24 tested for cancer between 1930 and 1970?

25 A. I do not.

1 Q. Do you know how many chemicals Dow
2 manufactured in that period of time?

3 A. As test compounds, or massive quantities
4 like PCBs?

5 Q. How many chemicals did Mon- -- strike
6 that.

7 How many chemicals did Dow manufacture and
8 sell between the 1930s and 1970s?

9 A. I have no firsthand knowledge of any
10 product study.

11 Q. Do you have any knowledge of the
12 percentage of products that it manufactured and
13 sold between 1930 and 1970 that it tested for
14 cancer?

15 A. I have no knowledge.

16 Q. You are familiar with DuPont's
17 evaluation of the carcinogenicity of azo dyes in
18 the 1930s?

19 A. Are you using DuPont as a euphemism for
20 Dr. Huber? I'm not aware of any publication by
21 DuPont. Are you including Dr. Huber and any
22 employee of -- yeah, we've discussed the Huber
23 study. Is that what you're referring to?

24 Q. Absolutely.

25 A. Okay. Well . . .

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1 content in the body.

2 So there is another -- there's another
3 factor here she hasn't taken into account, but I
4 don't know definitively, sitting here, without me
5 reviewing all my records, whether that was
6 recognized back then or not.

7 Q. All right. Let's go to the last
8 paragraph.

9 A. Okay.

10 Q. "Thus, despite positive laboratory
11 animal data, and except for chloracne, exposure to
12 PCBs has led to no convincing clinically
13 demonstrable chronic health effects in humans"; I
14 read that correctly?

15 A. Yes.

16 Q. And is that a correct statement of the
17 science as it existed in 1988?

18 MR. LAND: Objection; lacks foundation,
19 calls for speculation.

20 A. Sitting here today, I can't reconstruct
21 what was known in '88.

22 Q. Have you seen anywhere in the
23 peer-reviewed scientific literature the statement
24 that had Monsanto conducted a chronic study of PCBs
25 using the same methodology and protocol as Fitzhugh

1 and Nelson in 1946, that PCBs would have been
2 determined to be carcinogenic?

3 A. I have not seen anything published to
4 that effect, no.

5 Q. Have you seen that hypothesis expressed
6 anywhere in the literature that had Monsanto
7 conducted a carcinogenicity assay or a chronic
8 assay using the same protocol that Fitzhugh and
9 Nelson did in 1946, that PCBs, more likely than
10 not, would have been determined to be carcinogenic?

11 A. Is that different from the question you
12 just asked me? I think they're the same question.

13 Q. They're close.

14 A. What's the difference, then?

15 Q. Well, one is the statement, the other is
16 the suggestion of a hypothesis.

17 A. Oh, did someone propose a hypothesis?
18 No, not that I'm aware of.

19 Q. It's your belief that Fitzhugh and
20 Nelson's 1946 study --

21 A. '47?

22 Q. '47 -- demonstrated the carcinogenicity
23 of DDT?

24 A. Yes.

25 Q. Can you describe the protocol used by

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1 in a paper that has nothing to do with cancer, does
2 he state, does it have cancer?

3 Q. No, I didn't ask that at all. Please
4 pay attention to my question, sir.

5 A. I'm trying. I'm trying.

6 Q. Does the FDA know, in 1948, that DDT
7 causes cancer in the liver of laboratory rats?

8 A. Yes.

9 Q. Did FDA ban DDT in 1948?

10 A. Oh, that's -- no. No.

11 Q. Did it ban DDT in 1950?

12 A. No.

13 Q. Did it ban DDT in 1960?

14 A. It didn't have any authority to ban it.

15 Q. Did it ban it, sir? That's my question.

16 MR. LAND: Whoa, whoa, whoa, whoa,
17 whoa.

18 MR. CORLEY: You yell at this witness and
19 we're going to quit.

20 MR. MILLER: Authority or not.

21 MR. LAND: This is out of line.

22 MR. CORLEY: You need to back off a little
23 bit.

24 MR. MILLER: Oh, stop it.

25 MR. LAND: Do we need to take a break?

1 DDT on food crops greatly expanded after Fitzhugh
2 and Nelson's 1947 paper, correct?

3 A. I am not aware of the overall number of
4 tons used, no.

5 Q. By 1950, if I understand your report
6 correctly, it was understood in the scientific
7 community that DDT could bioaccumulate?

8 A. After what time?

9 Q. 1950.

10 A. It was known much earlier than that,
11 but, yeah, certainly by 1950.

12 Q. And by 1950, is it your testimony that
13 DDT was known to biomagnify?

14 A. We're going to have to have a discussion
15 of this term, because it seems to have a loaded
16 meaning. To me, I use biomagnification as the
17 increase in one trophic level. So when I
18 discuss -- I just want to make sure we're clear on
19 what your definition of "biomagnification" is. I'm
20 not an ecologist, so I don't conduct
21 biomagnification studies in the environment.

22 Q. But in any event, by 1950, your
23 testimony is that the scientific community
24 understood that DDT could bioaccumulate in living
25 organisms?

1 A. Yes. Yes.

2 (Exhibit 26 was marked for identification.)

3 Q. Okay. I'm going to hand you what I've
4 marked as Exhibit 26. It's entitled "DDT: A
5 Review of Scientific and Economic Aspects of the
6 Decision to Ban Its Use As a Pesticide." And this
7 is dated 1975; do you see that?

8 A. I do.

9 Q. And it's published by the U.S.
10 Environmental Protection Agency, correct?

11 A. Yes.

12 Q. Okay. Now, it's a long document, so
13 I've only excerpted one -- or a few particular
14 pages, but if you look at page 149 that I've
15 attached to that exhibit, it has the domestic
16 production consumption and exports of DDT in the
17 United States, 1950 to 1972; do you see that?

18 A. Yes.

19 Q. The domestic consumption of DDT
20 expressed in 1,000 pounds in 1957 was 57 million
21 638 pounds; is that correct?

22 A. I'm sorry. Where are you?

23 Q. 1950.

24 A. Oh, in 1950, yes.

25 Q. Domestic consumption, 57 million.

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1 A. I thought you said 53. I'm sorry. Yes,
2 that's correct.

3 Q. And by 1960, that had expanded to 70
4 million 146 pounds of domestic consumption of DDT?

5 A. That looks correct.

6 MR. LAND: Slight clarification. 70
7 million, 146 thousand, but that's fine.

8 Q. Yeah. 70 million, 146 thousand pounds
9 of domestic consumption of DDT in 1960, is that
10 correct? Yes. Domestically --

11 A. Are you answering your own question?

12 Q. I am.

13 A. Okay.

14 Q. Is it true that domestically, 70 million
15 146 thousand pounds of DDT was used in 1960?

16 A. Yeah. That looks correct, yes.

17 Q. Thank you.

18 A. Thank you for the answer.

19 Q. I could help you out a lot more if you'd
20 let me.

21 A. You could.

22 Q. So, you know, roughly, the use of DDT
23 domestically jumped, from 1950 to 1960, by about 13
24 million pounds, correct?

25 A. Approximately.

1 Q. And a substantial portion of that DDT
2 was used on food crops, correct?

3 MR. CORLEY: Objection, form; calls for
4 speculation.

5 A. It doesn't indicate what it was used
6 for.

7 Q. DDT was used during that period of time
8 in residential neighborhoods, correct?

9 MR. LAND: Objection; calls for speculation.

10 A. I have no information on that.

11 Q. During the period of time that it was
12 already known, according to your testimony, that
13 DDT caused cancer in laboratory animals and that it
14 was known that DDT could bioaccumulate in living
15 organisms, DDT nevertheless was used in greater
16 volumes during that period of time, correct?

17 A. It appears to be. Now, one thing I
18 want --

19 Q. There's no pending question, Doctor.

20 MR. LAND: We can address this later, if you
21 need it. No question is pending.

22 (Exhibit 27 was marked for identification.)

23 Q. Doctor, I'm going to hand you what we've
24 marked as Exhibit 27. This is a 1957 publication
25 by the United States Department of Public Health,

1 MR. LAND: Same objections.

2 A. I have no opinion.

3 Q. Okay. After 1950, when you say the
4 medical and scientific community understood that
5 DDT could bioaccumulate, did the patterns of DDT's
6 use domestically change?

7 MR. CORLEY: The same objections.

8 A. Opinions about its use changed. I
9 haven't looked at production and use numbers, but
10 during that time period, keep in mind, unlike other
11 compounds that were bioaccumulating, DDT was very
12 useful. So, did the subsequent wars, Korea and so
13 forth -- did they produce more to keep them from
14 developing typhoid, other -- so there's a
15 cost-benefit analysis that they have to conduct.
16 So they're not responding to these toxicity
17 studies. Whether or not they increased the
18 production or not, I don't know.

19 (Exhibit 28 was marked for identification.)

20 Q. I'm going to hand you what I've marked
21 as Exhibit Number 28.

22 You mentioned Dr. Lehman earlier in your
23 testimony today?

24 A. I did.

25 Q. Who is Dr. Lehman?

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1 A. He was the chief of -- I think it was
2 the pharmacology division in the FDA.

3 Q. And, in fact, what I've handed you as
4 Exhibit Number 28 is the document entitled
5 "Summaries of Pesticide Toxicity" by A.J. Lehman,
6 L-e-h-m-a-n, M.D., Director, Division of
7 Pharmacology, Bureau of Scientific Research, Food
8 and Drug Administration, U.S. Department of Health,
9 Education, and Welfare, Washington, D.C., correct?

10 A. Yes.

11 Q. And the date of this is 1965; is that
12 right?

13 A. That's correct.

14 Q. And this is after, obviously, Fitzhugh
15 and Nelson's paper was published, correct?

16 A. That's correct.

17 Q. And after you believe that it was
18 well-known that DDT could bioaccumulate, correct?

19 A. That's correct.

20 Q. And if you turn to page 16, there's a
21 discussion of DDT; is that correct?

22 A. That's correct.

23 Q. And it reads, "DDT," and then there's a
24 section entitled "Toxicity in rats," correct?

25 A. That's correct.

1 Q. And I've highlighted on your copy where
2 it refers to neoplasms, correct?

3 A. That's correct.

4 Q. And that would refer to cancer; is that
5 right?

6 A. That's correct.

7 Q. And Dr. Lehman writes DDT is not a
8 carcinogen, correct?

9 A. That's what he writes.

10 Q. Can you identify a single study of DDT
11 in which it was observed -- strike that. Let's do
12 this in a little bit more methodical way.

13 Let me ask this: Did you find a single
14 report in the scientific literature that referred
15 to PCBs as bioaccumulating between 1930 and 1966?

16 A. Yeah, could you just hold off for just a
17 second?

18 Q. Sure.

19 A. (Document reviewed.) I just want to
20 make sure the previous answer I gave you was
21 correct.

22 (Document reviewed.) Okay. I gave you the
23 previous answer that he stated neoplasm DDT is not
24 a carcinogen.

25 Q. Thank you.

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1 A. I see that, but I want to also state I
2 don't see a reference to the Fitzhugh study.

3 Q. Look at --

4 A. Oh, yes. I'm sorry. I'm sorry. Yes,
5 you're right.

6 Q. Look at "chronic feeding." It says
7 "Fitzhugh, O.G., and Nelson, A.A., Journal of
8 Pharmacology" --

9 A. Yes, sir. You're correct.

10 Q. -- "Experimental Therapy," correct?

11 A. Right.

12 Q. That's the 1947 paper we've talked
13 about?

14 A. Right. Yes.

15 Q. So Lehman is specifically referring to
16 Fitzhugh and Nelson that we've talked about that
17 you said indicated that DDT was carcinogenic,
18 correct?

19 A. I didn't say that, but I read you what
20 Fitzhugh said.

21 Q. You cited in your report a paper by
22 Woodward [sic], 1945?

23 A. Woodard.

24 Q. Woodard. I'm sorry.

25 It's entitled "Accumulation of DDT in the

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1 REPORTER'S CERTIFICATE

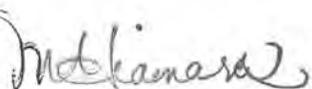
2 STATE OF COLORADO)
3) ss.
4 COUNTY OF DENVER)

5 I, MELANIE L. GIAMARCO, do hereby certify
6 that I am a Registered Professional Reporter and
7 Notary Public within the State of Colorado; that
8 previous to the commencement of the examination,
9 the deponent was duly sworn by me.

10 I further certify that this deposition was
11 taken in machine shorthand by me at the time and
12 place herein set forth, that it was thereafter
13 reduced to typewritten form, and that the foregoing
14 constitutes a true and correct transcript of the
15 proceedings had.

16 I further certify that I am not employed by,
17 related to, nor of counsel for any of the parties
18 herein, nor otherwise interested in the result of
19 the within litigation.

20 In witness whereof, I have affixed my
21 signature this 21st day of June, 2019.

22 
23

24 Melanie L. Giamarco, CSR RPR CRR

25 My commission expires: August 21, 2021.

Notary ID: 20014025991

EXHIBIT 11

Page 1

SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF LOS ANGELES
CASE NO. BC461315

VIDEO DEPOSITION OF RICHARD L. DEGRANDCHAMP, PHD
AUGUST 21, 2014

MICHAEL E. WILLIAMS, VIRGINIA RODRIGUEZ AND SUSAN
LAURY,

Plaintiffs,

vs.

MONSANTO COMPANY, ET AL.,

Defendants.

APPEARANCES:

ALLEN STEWART, P.C.

By Steve Baughman Jensen, Esq.

Republic Center

325 North St. Paul Street, Suite 4000

Dallas, Texas 75201

Appearing for Plaintiffs.

STEPTOE & JOHNSON, LLP

By Lawrence P. Riff, Esq.

633 West Fifth Street, Suite 700

Los Angeles, California 90071

and

HUSCH BLACKWELL, LLP

By Adam E. Miller, Esq.

190 Carondelet Plaza, Suite 600

St. Louis, Missouri 63105

Appearing for Defendants.

ALSO PRESENT: Robert Kaley

Richard L. DeGrandchamp, PhD
August 21, 2014

Page 2

1 Pursuant to Notice and the California Rules
2 of Civil Procedure, the Video Deposition of
3 Richard L. DeGrandchamp, PhD., called by Defendants,
4 was taken on August 21, 2014, commencing at 9:00 a.m.,
5 at 1700 Lincoln Street, Suite 4700, Denver, Colorado,
6 before Harriet S. Weisenthal, Registered Professional
7 Reporter and Notary Public within and for the State of
8 Colorado.

9

10

11 I N D E X

12	DEPOSITION OF RICHARD L. DEGRANDCHAMP, PHD:	
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Paszkiewicz Court Reporting
(618) 307-9320 / Toll-Free (855) 595-3577

Richard L. DeGrandchamp, PhD
August 21, 2014

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1 history of science?

2 **A Science?**

3 Q Right.

4 **A No.**

5 Q Are you an expert in the history of
6 animal bioassay testing?

7 MR. JENSEN: Objection to form.

8 THE WITNESS: Do I have a degree in that?

9 BY MR. RIFF:

10 Q No.

11 **A Could you --**

12 Q Okay. So, I am now asking, really, an
13 opinion question. I am asking your opinion whether you
14 are -- whether you consider yourself an expert in a
15 subject. That's what I am asking.

16 And, so, that's what I am asking: Do you
17 consider yourself an expert in the history of cancer
18 studies involving animal bioassays?

19 MR. JENSEN: Objection to form. Calls
20 for a legal conclusion.

21 THE WITNESS: The history, no.

22 BY MR. RIFF:

23 Q Does the term, "state-of-the-art," mean
24 something to you?

25 **A Yes.**

Richard L. DeGrandchamp, PhD
August 21, 2014

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1 STATE OF COLORADO)

2)ss. REPORTER'S CERTIFICATE

3 COUNTY OF DENVER)

4 I, Harriet S. Weisenthal, do hereby certify that I
5 am a Registered Professional Reporter and Notary Public
6 within the State of Colorado; that previous to the
7 commencement of the examination, the deponent was duly
8 sworn to testify to the truth.

9 I further certify that this deposition was taken
10 in shorthand by me at the time and place herein set
11 forth, that it was thereafter reduced to typewritten
12 form, and that the foregoing constitutes a true and
13 correct transcript.

14 I further certify that I am not related to,
15 employed by, nor of counsel for any of the parties
16 or attorneys herein, nor otherwise interested in
17 the result of the within action.

18 In witness thereof, I have affixed my signature
19 and seal this August 26, 2014.

20 My Commission expires September 7, 2017.

21
22 _____
23 Harriet S. Weisenthal
24
25

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EXHIBIT 12

Page 1380

IN THE CIRCUIT COURT OF THE COUNTY OF ST. LOUIS
TWENTY-FIRST JUDICIAL CIRCUIT
THE HONORABLE STEVEN H. GOLDMAN, PRESIDING

JULIA SMITH, et al.,)
)
PLAINTIFFS,)
)
vs.) Cause No. 10SL-CC03822
)
MONSANTO CO., et al.,)
)
DEFENDANTS.)

=====
REPORTER'S TRANSCRIPT OF PROCEEDINGS
VOLUME 8
SEPTEMBER 17, 2015
SESSION B
CROSS EXAMINATION OF
DR. RICHARD DEGRANDCHAMP
Reported by: Rhonda J. Laurentius, CCR, RPR
=====

For the Plaintiffs:
Allen Stewart, P.C.
Mr. Allen Stewart
Mr. Steve Baughman Jensen

Williams Kherkher
Mr. Steven J. Kherkher

For the Defendants:
White & Williams
Mr. Thomas Goutman
Mr. Christopher DiMuro

Husch Blackwell
Ms. Christine Miller
Mr. Adam Miller

1 Q. Now you mentioned that you were an
2 adjunct -- What is your title there?

3 A. I'm a lecturer.

4 Q. Lecturer. You teach two courses a
5 year, is that right?

6 A. Yes.

7 Q. And one is in the fall, one is in the
8 spring, and for each of those courses you earn
9 \$5,000?

10 A. Yes.

11 Q. All right. But as a lecturer, as
12 whatever faculty position you might have at the
13 University of Colorado, you don't operate or run a
14 toxicology lab, is that correct?

15 A. Not in my current position, no.

16 Q. In fact, you haven't run a lab or
17 worked in a lab since the early 90s, correct?

18 A. I believe my last lab was at the
19 Medical School, University of Colorado, and I think
20 that was the early 90s, yes.

21 Q. So about 24 years ago was the last
22 time?

23 A. Yeah, it's been a long time.

24 Q. So when you said we, this is what we as
25 toxicologists do in a laboratory, you haven't done

1 **that kind of work in a quarter century, correct?**

2 A. I haven't done any laboratory work in a
3 quarter century, but I'm part of the toxicology
4 community.

5 Q. Okay. But you haven't done laboratory
6 work in 24 years or so?

7 A. That's correct.

8 Q. All right. Now you talked a little bit
9 about these various genetic assays or tests that
10 could be run, and you showed the jury some
11 demonstrative showing these results. One of them
12 is called a Comet Assay, correct?

13 A. Correct.

14 Q. You've never conducted that kind of
15 test yourself, is that correct?

16 A. I have not.

17 Q. And one of them was a P32 post-labeling
18 study, do you remember that study?

19 A. Yes.

20 Q. And you've never conducted that kind of
21 study yourself, correct?

22 A. No.

23 Q. And another one was a study to evaluate
24 whether PCBs could potentially have an effect on a
25 tumor suppressor gene you called TP-53?